3. Broadcast experience

The applicant will claim 100% past broadcast experience credit. Mr. Watkins has been employed by the following licensees and held the positions indicated on the dates shown:

1986 - 1988	Account Executive WJYL - FM, licensed to Jeffersontown, Kentucky, owned by Inter-Urban Broadcasting
1988 - 1989	Account Executive WLSY - FM, licensed to Jeffersontown, Kentucky,

EXHIBIT E

EXHIBIT E
ENGINEERING STATEMENT
ON BEHALF OF
D.E.K.W. COMMUNICATIONS, INC.
NEW FM STATION
CH234A 94.7 MHz. 3.0 kW 100 METERS
NEW ALBANY, INDIANA

FIGURES INDEX

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

D.E.K.W. Communications, Inc.

Call letters *(if issued)*	**Is this application being filed in response to a window?** ☒ **Yes** ☐ **No**
Not Issued	**If Yes, specify closing date:** 11/15/91

Purpose of Application: *(check appropriate box(es))*

- ☒ **Construct a new (main) facility**
- ☐ **Construct a new auxiliary facility**
- ☐ **Modify existing construction permit for main facility**
- ☐ **Modify existing construction permit for auxiliary facility**
- ☐ **Modify licensed main facility**
- ☐ **Modify licensed auxiliary facility**

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- ☐ **Antenna supporting-structure height**
- ☐ **Effective radiated power**
- ☐ **Antenna height above average terrain**
- ☐ **Frequency**
- ☐ **Antenna location**
- ☐ **Class**
- ☐ **Main Studio location**
- ☐ **Other** *(Summarize briefly)*

File Number(s) _____

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
234	New Albany	Floyd	IN

Class *(check only one box below)*

☒ A ☐ B1 ☐ B ☐ C3
☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) **Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.** Approximately 1.3 km Northeast of Edwardsville, Floyd County, Indiana

(b) **Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.**

Latitude	38°	17'	37"	Longitude	85°	54'	07"

8. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ **Yes** ☒ **No**

If Yes, give call letter(s) or file number(s) or both. Does Not Apply

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

Does Not Apply

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☐ Yes ☒ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available. See engineering statement for FAA discussion

Exhibit No. DNA

Date _____ Office where filed _____

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Heliport (private) Hospital	6.13 km	81 degrees
(b)	County Line Airport (private)	7.68 km	252.9 degrees

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level:	270	meters
(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and	30	meters
(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)]	300	meters

(b) Height of radiation center: *(to the nearest meter)* H - Horizontal; V - Vertical

(1) above ground	27	meters (H)
	27	meters (V)
(2) above mean sea level [(a)(1) + (b)(1)]	297	meters (H)
	297	meters (V)
(3) above average terrain	100	meters (H)
	100	meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. E

9. Effective Radiated Power:
(a) ERP in the horizontal plane 3.0 kw (H*) 3.0 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field. DNA kw (H*) DNA kw (V*)

Exhibit No. DNA

*Polarization

10. Is a directional antenna proposed? ☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field. Exhibit No. DNA

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)? ☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service. Exhibit No. DNA

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal? ☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No. DNA

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207? ☐ Yes ☒ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply? ☒ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers. Exhibit No. E

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No. DNA

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: Exhibit No. DNA

(1) Protected and interfering contours, in all directions (360°), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? ☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)* Exhibit No. E

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. E

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. E

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 5.6 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 1793.5 sq. km. Population 772,497

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. DNA

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: N.G.D.C.)

[ ] Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 8 to 16 km (meters)	Predicted Distances	
		To the 0.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
*			
0	47	9.4	16.6
45	103	13.6	24.5
90	158	17.2	29.6
135	159	17.3	29.7
180	146	16.5	28.5
225	55	10.2	18.2
270	71	11.5	20.6
315	63	10.9	19.4

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. DNA

If No, explain briefly why not. Categorically excluded from environmental processing pursuant to Section 1.1306 of the FCC rules. See Exhibit E for discussion and non-ionized radiation calculations

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

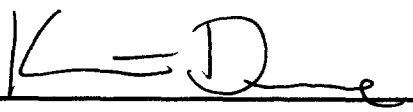
Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
Kenneth Devine	Technical Consultant
Signature 	Address *(Include ZIP Code)* Broadcast Technical, Inc. P. O. Box 13475 New Orleans, LA 70185
Date November 12, 1991	Telephone No. *(Include Area Code)* (504) 866-3846

EXHIBIT E
ENGINEERING STATEMENT
ON BEHALF OF D.E.K.W. COMMUNICATIONS, INC.
NEW FM STATION
CH234A 94.7 MHz. 3.0 kW 100 METERS
NEW ALBANY, INDIANA

INTRODUCTION

This engineering statement, together with Section V-B of FCC Form 301 to which it is attached as Exhibit E, furnishes technical data in support of an application by D.E.K.W. Communications, Inc., for a new FM Broadcast facility licensed to New Albany, Indiana.

All calculations, contours and other technical information contained in or attached to this statement have been determined in accordance with the existing rules of the Federal Communications Commission.

ALLOCATION STUDY

The FCC has assigned FM Broadcast Channel 234A to the community of New Albany, Indiana (see Docket 88-457). Whereas the New Albany allotment was requested prior to October 2, 1989 under 73.207 spacing requirements equivalent to those of prior rules, applicant requests processing under 73.213(c)(1) applicable to grandfathered short spaced stations and allotments.

Figure 1 of this exhibit presents the results of a detailed channel allocation study. As shown in this figure, the proposed site meets all minimum distance separations pursuant to the Commission's rules and regulations applicable to grandfathered Class A short spaced stations and allotments.

T0WER AND ANTENNA SYSTEM

The antenna system to be employed for the proposed FM operation at New Albany will consist of a three-bay, circularly polarized FM antenna, side mounted on a new uniform cross section, guyed steel tower as shown in the antenna sketch attached as Figure 3. The geographic coordinates and ground elevation above mean sea level are included in this sketch.

ELEVATION AND CONTOUR DATA

The average elevations from three to sixteen kilometers from the proposed site along the eight required radials were determined using a computer method in accordance with the procedures specified in Section 73.312(d) using the 30 Second Point Data File of the National Geophysical Data Center.

Figure 4 is a tabulation of average elevations, effective antenna heights and distances to the 70 dBu and 60 dBu coverage contours. The contour data of Figure 4 were determined through a computer method similar to the method outlined in Section 73.313 of the FCC Rules.

The proposed 3.16 mV/m (70 dBu) and 1.0 mV/m (60 dBu) contours have been plotted from the data in Figure 4 and are shown, along with the shaded boundaries of New Albany on the coverage map attached as Figure 5.

As illustrated on Figure 5, the proposed 3.16 mV/m (70 dBu) contour covers all of New Albany. The proposal, therefore, fully complies with 47 CFR 73.315.

AERONAUTICAL AND ENVIRONMENTAL IMPACT CONSIDERATIONS

The proposed antenna installation would utilize a newly constructed 30 meter tower structure but would not have a significant environmental impact according to Section 1.1307 of the Commission's rules.

NON-IONIZING RADIATION CALCULATIONS

In accordance with section 1.1307(b) of the Commission's rules, an assessment was made of the proposed facility's radio frequency radiation levels. OST Bulletin No.65 dated October 1985 was utilized to determine that the proposed facility would not exceed any standards for radio frequency radiation as defined by ANSI C95.1-1982.

Study of the area within 1000 meters of the proposed site reveals no other likely sources of non-ionizing electromagnetic radiation (NIER) at broadcast frequencies. Thus, the existing ground level NIER values near the base of the proposed structure are believed to be negligible. Precise calculations are made only with regards to the radiation attributable to the facilities proposed herein.

The general analysis was done by making certain assumptions, then calculating the power density at ground level and finding the percentage of the allowable level. It was assumed that if the final percentage was less than 100%, then the construction of the proposed facilities at the proposed location would present no radiation hazard. As will be demonstrated, the proposed operation constitutes only 27.498% of the allowable limit. Thus, the construction of the facilities proposed would present no radiation hazard.

The following assumptions were made for the New Albany FM analysis:

1. All facilities within 1 km. are considered to be at the same site as the proposed site.

2. All FM stations were considered to be circularly polarized.

3. Worst case downward radiation was used.

4. S, the power density at ground level was calculated using the following formula:

Where:

$$S = \frac{(0.64)\ (1.64)\ (\text{Power})\ (1000)}{(\Pi)(\text{Distance})^2}$$

S = Power Density at ground level in milliwatts/square centimeter

Π = 3.1416

Power = total power in watts

Distance = from base of tower to center of radiation in cm.

$(x)^2$ = to the second power (squared)

Table A gives the results of the analysis and clearly demonstrates that the construction of the proposed New Albany FM operation does not pose a radiation hazard.

TABLE A

Station	**Height** *(meters)*	**Power** *(kilowatts)*	**"S"** *(mw/sq.cm)*	**"S" Limit** *(mw/sq.cm)*	**Percentage of Limit** *(%)*
Proposed	27	6.0	.2749772	1.000	27.498
TOTAL					**27.498**

ELECTROMAGNETIC COMPATIBILITY and BLANKETING

The proposed antenna site is not located within 200 feet (60.96 meters) of any known AM, FM, or television broadcast facility. There are several FM and television broadcast facilities located within 10 km of the proposed transmitting site.

No adverse interaction is expected to occur between the proposed facility and the above referenced facilities. Applicant acknowledges its responsibility to correct any problems caused by intermodulation interference resulting from its

FIGURE 1
FM SPACING STUDY
NEW FM STATION
CH 234 A 94.7 MHz. 3 kW 100 METERS
D.E.K.W. COMMUNICATIONS, INC.
NEW ALBANY, INDIANA

REFERENCE
38 17 37 N
85 54 07 W

CLASS A

DISPLAY DATES
SEARCH 11-08-91
DATA 11-12-91

Previous rule spacings

CHANNEL 234 - 94.7 MHz

CALL / TYPE	CH# / LAT	CITY / LNG	STATE / PWR	BEAR' / HT	D-KM / D-Mi	R-KM / R-Mi	MARGIN (KM)
ALOPEN	**234A**	**New Albany**	**IN**	**6.3**			
AL N	*38 18 48*	*85 53 57*	*0.00 kW*	*0M*			
88-457 WO= 911016 911115							
Site Restricted-Effective 10-15-91							
WLAPFM	**233C1**	**Lexington**	**KY**	**98.4**	**129.00**	**129.0**	**0.00 ***
LI CN	*38 07 25*	*84 26 45*	*100.00 kW*	*195M*	*80.1*	*80.2*	
Trumper Communs. of KY/Ltd. P BLH830906AA **(rounded to nearest kilometer)**							
AD232	**232C2**	**Hardinsburg**	**KY**	**211.5**	**55.60**	**55.0**	**0.60**
AD 37	*52 00 86*	*14 00*	*0.00 kW*	*0M*	*34.6*	*34.2*	
H.I.C. Broadcasting, Inc. RM6532							
COUNTERPROPOSAL TO HAWESVILLE, KY							
AP234	**234A**	**Philpot**	**KY**	**234.4**	**112.48**	**105.0**	**7.48**
AP CN	*37 42 13*	*86 56 35*	*3.00 kW*	*100M*	*69.9*	*65.3*	
Scott County Communications, BPH900706MI 910114							
ALOPEN	**234A**	**Philpot**	**KY**	**235.4**	**112.72**	**105.0**	**7.72**
AL N	*37 43 03*	*86 57 32*	*0.00 kW*	*0M*	*70.1*	*65.3*	
WO= 900601 900705							
Site Restricted-Effective 6-1-90							
AD231	**231A**	**Brooks**	**KY**	**161.3**	**35.70**	**27.0**	**8.70**
AD 37	*59 20 85*	*46 18*	*0.00 kW*	*0M*	*22.2*	*16.8*	
Christian R. Caggians RM6461							
SITE RESTRICTED 9.7 KM-ALTERNATE CHANNEL							

PREPARED BY:

BROADCAST TECHNICAL, INC.
NEW ORLEANS, LOUISIANA
November, 1991

FIGURE 1, Page 2
FM SPACING STUDY
NEW FM STATION
CH 234 A 94.7 MHz. 3 kW 100 METERS
D.E.K.W. COMMUNICATIONS, INC.
NEW ALBANY, INDIANA

REFERENCE
38 17 37 N
85 54 07 W

CLASS A

DISPLAY DATES
SEARCH 11-08-91
DATA 11-12-91

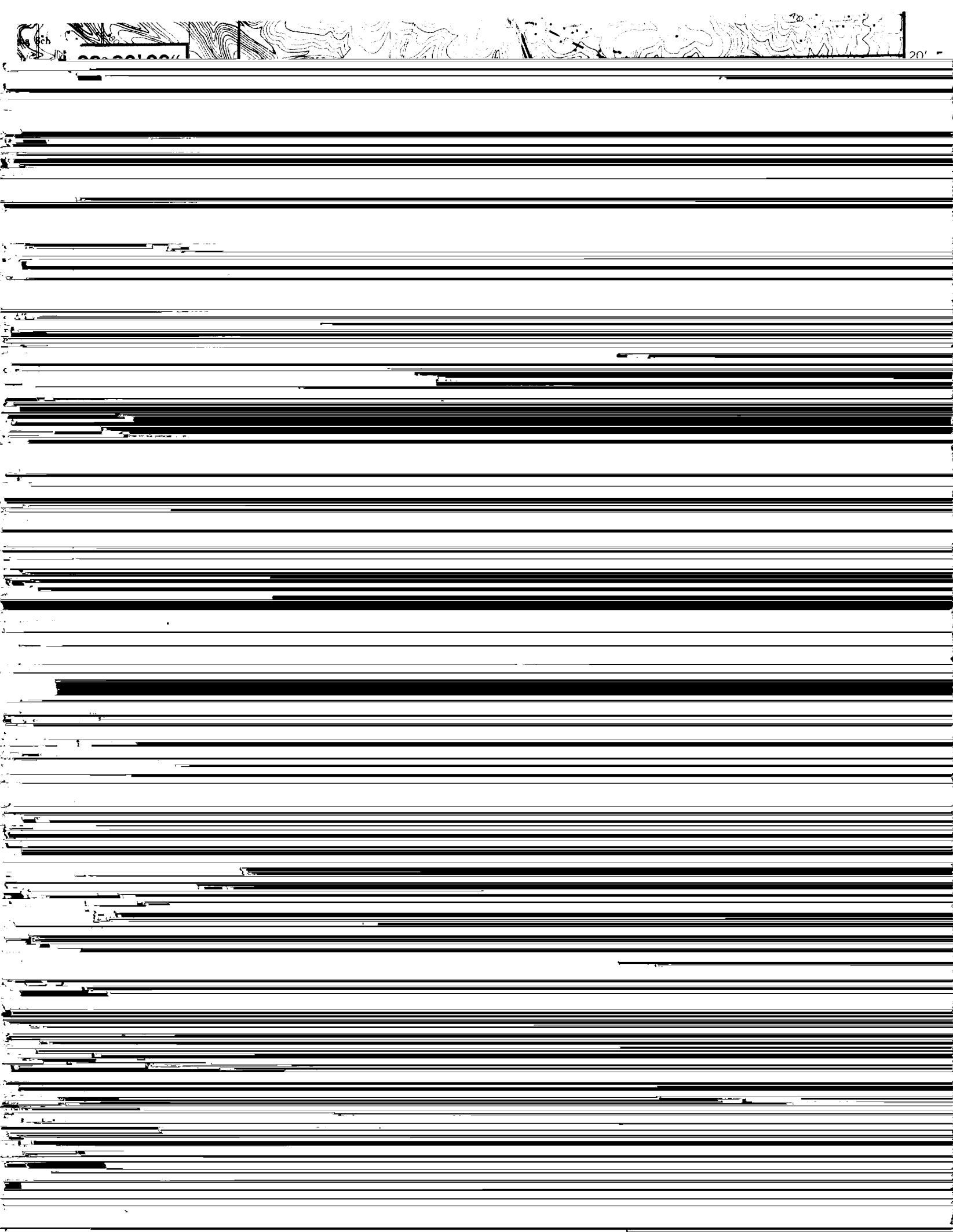
Previous rule spacings

CHANNEL 234 - 94.7 MHz

CALL TYPE	CH# LAT	CITY LNG	STATE PWR	BEAR' HT	D-KM D-Mi	R-KM R-Mi	MARGIN (KM)
AP234	**234A**	**Philpot**	**KY**	**235.5**	**114.37**	**105.0**	**9.37**
AP CN	*37 42 37*	*86 58 31*	*3.00 kW*	*100M*	*71.1*	*65.3*	
Commonwealth Comm., Corp., of BPH900706ME 910114							
AP234	**234A**	**Philpot**	**KY**	**235.4**	**115.69**	**105.0**	**10.69**
AP CN	*37 42 04*	*86 59 08*	*3.00 kW*	*100M*	*71.9*	*65.3*	
Bluegrass On The Air, Inc. BPH900705MJ 910114							
AP234	**234A**	**Philpot**	**KY**	**235.3**	**116.28**	**105.0**	**11.28**
AP CN	*37 41 51*	*86 59 26*	*3.00 kW*	*100M*	*72.3*	*65.3*	
Ruth H. Steele BPH900703MB 910114							
WFBQ.A	**234B**	**Indianapolis**	**IN**	**351.6**	**177.16**	**163.0**	**14.16**
AP CN	*39 52 20*	*86 12 07*	*47.00 kW*	*272M*	*110.1*	*101.3*	
Taft Television & Radio Compa 861117IH							
WFBQ	**234B**	**Indianapolis**	**IN**	**351.8**	**180.16**	**163.0**	**17.16**
LI CN	*39 53 59*	*86 12 02*	*52.00 kW*	*259M*	*112.0*	*101.3*	
Taft Television & Radio Compa BLH6775							
GRANDFATHERED AT 52KW @ 259M HAAT.							
WGSQ.C	**234C**	**Cookeville**	**TN**	**168.1**	**240.41**	**222.0**	**18.41**
CP CN	*36 10 26*	*85 20 37*	*100.00 kW*	*402M*	*149.4*	*138.0*	
WPTN/WGSQ, Inc. BPH880428NM							

END CHANNEL 234A STUDY

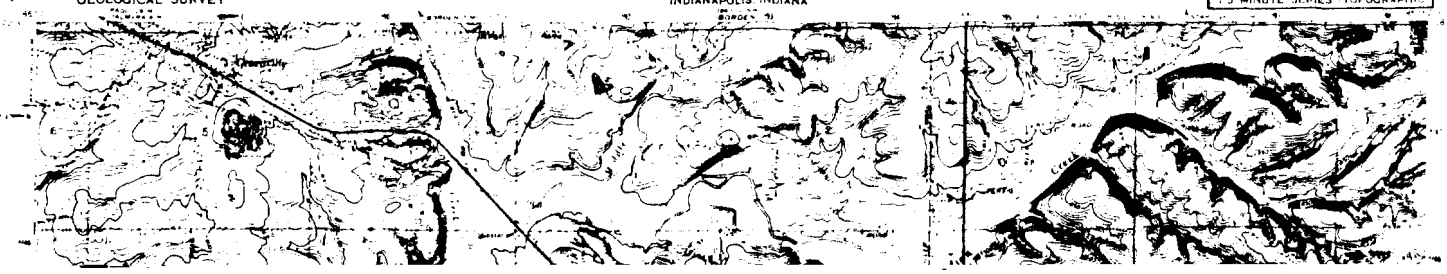
PREPARED BY: **BROADCAST TECHNICAL, INC.**
NEW ORLEANS, LOUISIANA
November, 1991



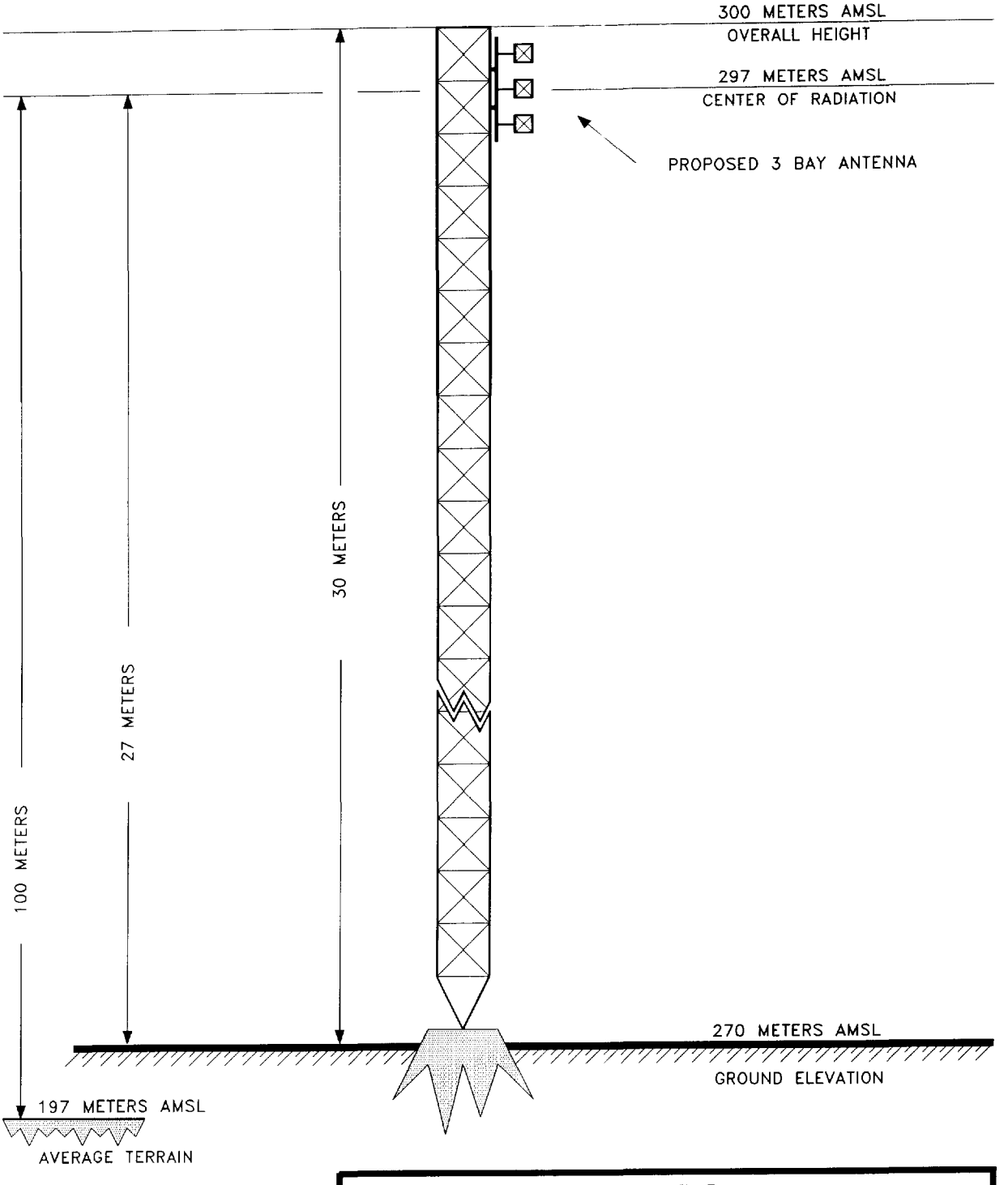
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
INDIANAPOLIS, INDIANA

GEORGETOWN QUADRANGLE
INDIANA
7.5 MINUTE SERIES (TOPOGRAPHIC)



N. 38° 17' 37"
W. 85° 54' 07"



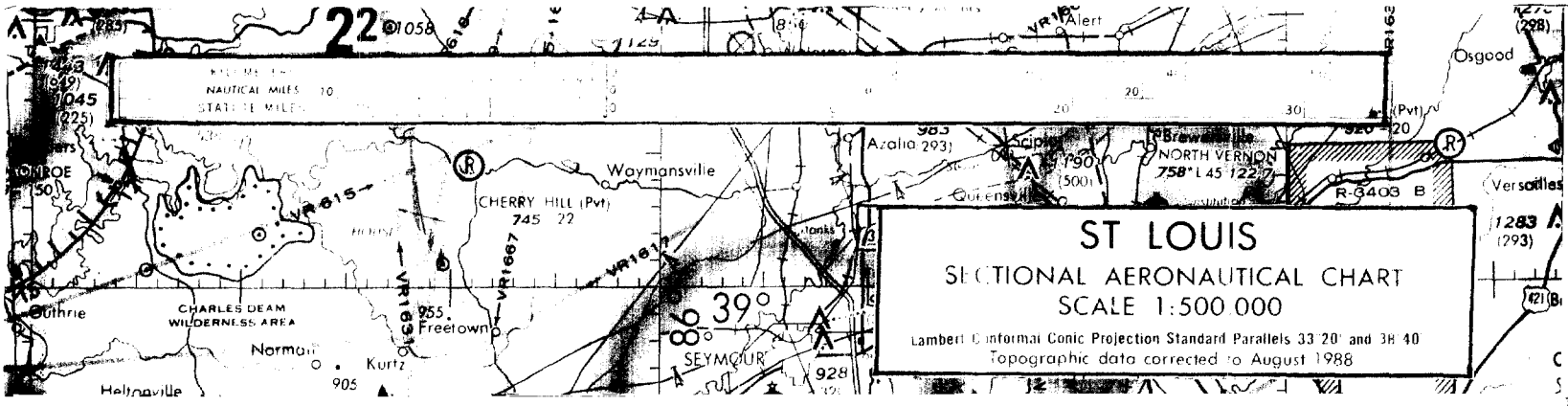
Not to Scale:

FIGURE 3
ANTENNA SKETCH
NEW FM STATION
CH. 234A 94.7 MHz. 3.0 kW 100 METERS
D.E.K.W. COMMUNICATIONS, INC.
NEW ALBANY, INDIANA

FIGURE 4
ELEVATION AND CONTOUR DATA
NEW FM STATION
CH 234A 94.7 MHz. 3.0 kW 100 METERS
D.E.K.W. COMMUNICATIONS, INC.
NEW ALBANY, INDIANA

Radial and Bearing (Degrees)	Average Elevation (3-16km) Meters	Effective Antenna Height Meters	Effective Radiated Power (dBk)	Predicted Contours 70 dBu km	60 dBu km
0.0	250	47	4.77	9.4	16.6
45.0	194	103	4.77	13.6	24.5
90.0	139	158	4.77	17.2	29.6
135.0	138	159	4.77	17.3	29.7
180.0	151	146	4.77	16.5	28.5
225.0	242	55	4.77	10.2	18.2
270.0	226	71	4.77	11.5	20.6
315.0	234	63	4.77	10.9	19.4

Height of radiation center above mean sea level 297.0 meters
Height of average terrain above mean sea level 197.0 meters


22
NAUTICAL MILES 10 0 0 20 20 30
STATUTE MILES
Alert
Osgood
Azalia 293)
NORTH VERNON
758* L 45 122.7
R-3409 B
Versailles
Waymansville
CHERRY HILL (Pvt)
745 22
VR1615
VR1667
VR1617
VR1618
CHARLES DEAM
WILDERNESS AREA
Guthrie
Norman
Kurtz
Freetown
955
905
SEYMOUR
928
39°
85°
ST LOUIS
SECTIONAL AERONAUTICAL CHART
SCALE 1:500 000
Lambert Conformal Conic Projection Standard Parallels 33 20' and 38 40
Topographic data corrected to August 1988